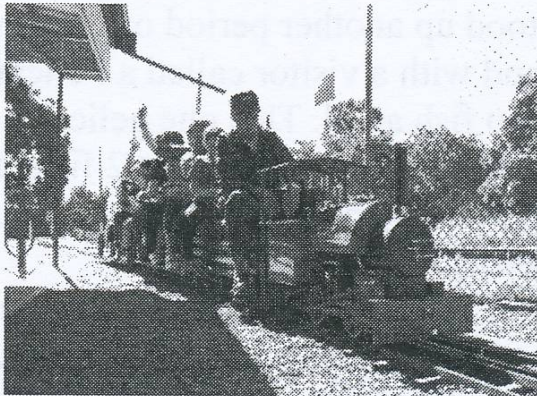




**SOUTH AUSTRALIAN SOCIETY OF MODEL
& EXPERIMENTAL ENGINEERS**

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Happenings Autumn 2014

From the President

Autumn has hit and we are all relieved that summer did not bring the extreme temperatures for many days, although we did have to cancel a public field day and a yearly night run. During this period we also encountered a couple of storms in which, one particular tree I had my eyes on, decided to break large limbs on each occasion and fortunately, with minimum damage. The Unley Council were notified, who investigated and promptly trimmed the tree for no further happenings in the near future.

Our pond has stood up another period of warm weather with minimal algae and with a visitor called a Pelican; we now face the dilemma of no fish at all. This one pelican came in one sitting and decided to leave us with just 2 fish. The natural treatment seems to be working well and we would be looking at it full time from now on.

We had our yearly engineering inspection and all went well with some jobs to do in the next twelve months. Some of the jobs to do are

- Replace timbers on the 7 ¼" Trestle Bridge
- Replace timbers on the walk over bridge to the steam house
- Continuing maintenance on all seating

At the present moment there is a bit of maintenance work going on around the property from

- per way, track repair, sleeper replacement
- riding truck bogies, general upkeep
- gardening, planting of new lawn, paving, tree trimmings etc
- unloading traverser, modifications and bearing changeover
- new fencing installations

On Sunday 6th April, our Public Field Day we saw a couple of new locos, Matthew Leslie's BHP 6076 Mt Goldsworthy on

the 7 ¼" in 1 ½" scale, it looks like a large loco, had an impressive paint job, handle our tight radii's very smoothly and drove comfortably with 2 carriages of people all afternoon. Allan Wallace had his Black Five on the 7 ¼" and running reliably all afternoon and very happy at the end of the day.

On Thursday 9th April a small group of members put on a display at Bunnings, Woodville for their Easter Family night. It was very well attended and we had a lot of enquiries about the club. Thank you to those to participated.

This year's AALS convention was held at Tullamarine Live Steamers at Bulla, Victoria, SASMEE members attended the convention and post club events across Victoria. I'm sure all of those who attended had a good time.

I am very pleased to announced that Matthew Leslie won the Sydney Society of Model Engineers Trophy Most Popular Locomotive – people's choice SASMEE Award,

Best Non Steam Prototypical Locomotive – judged
Congratulations from all and well done.

It is pleasing to see the camaraderie amongst members and the involvement needed for the success of each Public Field Day and for the Public to go home and want to come back another day. The committee thanks all that attend to make these days most enjoyable. If you're interested in joining the committee, please see you fellow committee person for a nomination form.

Members please note.

Working bees are on Wednesdays from 8am onwards and Saturdays from 1pm onwards. Remember many hands make light work.

Come on, get involved.

Thanks

John Monte

Club Happenings.

By the Vice President.

Public Field Day 2nd March 2014

A warm pleasant day where we had the competition of Clipsal 500, WomAdelaide Adelaide Festival and Fringe so to get over 330 people was doing pretty well.

Thirty Five members attended providing Four 71/4' locos, seven 5" locos with Allan Wallace's little Juliet the sole 31/2" loco. Max Shuard was our only Garden Gauge participant. Come on fellows, a little more support would be appreciated. Nine boats kept the pond alive all afternoon.

The canteen, as usual did well with chips, hotdogs and ice cream and coffee the main sellers. Thankyou Jackie, Toni and Cookie.

Public Field Day 15th March 2014

Over 350 members of the public plus many under 3 yoa who we do not charge or count enjoyed a very pleasant day with three 71/4 locos, five 5" locos providing rides all afternoon. These were accompanied by 2 G gauge train sets and 8 boats. In all 39 members attended.

The canteen was staffed by Jackie Monteodorisio, Margaret Coxon, Dawn Schaefer, Anne Hardy and Chris Lyas. Many thanks for your efforts ladies, our visitors really appreciate your hot food, cold drinks ice creams and coffee and tea.

Public Field Day 6th April 2014

A very pleasant autumn day brought out 530 visitors plus the their children under three. With 47 members present members were kept busy with rides, G gauge trains and boats. In all we had seven 71/4 locos, the highest for many years. Among these were the new locos of Matt Leslie and Allan Wallace. Matt's is a BHP Mount Goldsworthy diesel out line, a beautiful piece model engineering and a suitable accompaniment to his 5" loco of the same design. Allan Wallace's steam loco is a black 5, giving a 3 1/2' and 5" as well of this design. We are waiting to see a G Gauge to provide a full range. As usual Allan's work was above reproach and a joy to behold. We look forward to final completion with cladding.

Five 5" locos completed the line up for the rides and with in excess of 530 people both gauges were busy all afternoon with the 5" even going overtime. Many thanks to all drivers.

Three G gauge and 12 boats completed the line up for the afternoon.

We were able to welcome Mike Crean from Western Australia with his ride in 71/4" gauge NSW 44 Class loco on his way to the Easter Convention in Melbourne. While Mike was able to drive prior to public attendance incompatibility between his brake fittings and our wagons prevented him carrying passengers, a great shame.

The Canteen was staffed by Dawn Schaefer, Lynne Leslie, Libby Foster, Anne Hardy with Alan Hardy keeping the chip fryers going flat out. Thank you ladies and Alan.

A truly enjoyable day was had by both the members and the public.

Working Bee Saturday 8th April 2014

John Monte, Jeff Schaefer, Josh Driscoll and John Foster removed the barley straw bales from the pond and cleaned the bottom. Not pleasant jobs as the bales are heavy, dirty and very smelly particularly when the ducks have used them for toilets. Never the less the job had to be done and they have worked. The boaties should be appreciative as their absence was obvious.

We are now trying a new chemical formulation obtained through Mat Leslie which is apparently formulated from natural sources and is intended to limit the weed and alga growth while not harming the fish. So far seems to be working well and though relatively expensive eliminates the regular bale removing task.

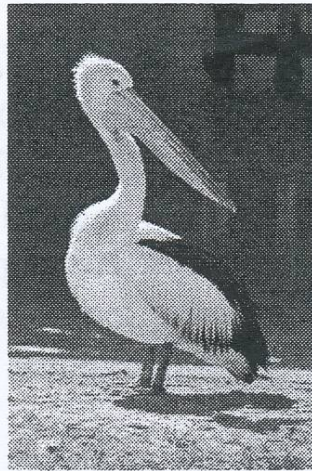
We also have several young fish which have survived to about 150mm. Our problem now will be to keep the cormorant away.

Forget about the Cormorant they only take one fish at a time and only little ones.. This was written 23 April, next day we had a visit from a Pelican. He could not take off from the pond and had to use the roadway for an airstrip this may be because he /she had a belly full of our fish. He enjoyed our restaurant so much he came back Saturday for another beak full. Do not think he will return, can't find any fish in the pond. Does any one know where I can get some Piranha so we can fight back?

At the same time as pond cleaning John Lewis was there crushing char and Barry Dunstan attending to tracks.

Members please remember that although the Wednesday group do a good maintenance job. Saturday working bees

often only consist of John Monte who gets lonely. How about some company for him???



Public Field Day 15th April 2014

We were not sure just what to expect with the field day falling on Easter Saturday and the annual convention being held in Melbourne. As it turned out we had over 400 paying guests, 29 members, four 71/4 locos, five 5" locos, Four boats and four members using the G/O gauge track.

There were six birthday parties booked in plus a couple of informal parties. One birthday party had around 40 guests. With good weather everyone seemed to enjoy themselves. We had one rear boggy of a two wagon 5" train derail. Apparently, a young couple thought a curve was a good place to kiss, which required the person in front to turn around. No one was hurt but there was some embarrassment and everyone else had a good laugh at their expense. Do we need a sign saying NO KISSING on trains to add to our no photograph sign!!!!

The canteen was served very well by Libby Foster, Nickie Mere, Shirley Mundi, Jill Smith and Margaret Coxon. A heartfelt thankyou ladies.

Ian Foster manned the ticket office and John Foster was Safety Officer. Thanks also to the drivers and the station attendants.

Public Field Day Sunday 4th May 2014

Again a massive attendance with over 600 attending, Fortunately we had six 71/4" locos and five 5" locos and 47 members to keep the crowds moving. Matt Leslie was there with his 71/4" Mt Goldsworthy BHP trophy winning loco and another new one to the club was the Dicker's 71/4" monster vertical boiler engine. I am not sure if it has a name but it is different.

The 5" crew were very busy particularly when Graeme Driscoll had problems and had to pull out leaving only one steamer going. The boats were there in force with 12 boats in action. There were three keen G/O gauge operators with locos and loads of rolling stock. Nice to see this activity building up.

The canteen ladies had a record day. Many thanks to Jackie, Anne Hardy, Toni Offler and Lynn Leslie.

John Foster manned the ticket box and Ian Foster watched over safety for the afternoon.

Visit by Classic Train Collectors Sunday 11th May 2014

Contributed by Allan Wallace.

After building an O gauge Live Steamer I was looking for opportunities to run it and soon found a group who meet monthly at the private layouts of their members. This proved

Cont'd

to be an excellent opportunity to run on a variety of magnificent garden railways alongside some beautiful and historic trains, with a group of people passionate about collecting, restoring and running classic model trains in O and G gauge. The group is aptly named "Classic Train Collectors" (CTC) and like us model engineers, they come from all walks of life and bring with them a wealth of knowledge, experience and stories. You can check them out at the Adelaide Miniature Railway Exhibition every June.

Now that SASMEE has a garden railway layout, we were in a position to host a CTC meeting, on Sunday 11 May 2014. Nine CTC members attended, bringing both clockwork and electric models to run. It's quaint to be reminded of one's childhood, seeing the Hornby O gauge clockwork trains running around. In addition several SASMEE members brought trains to run, and the weather was perfect so a very pleasant afternoon was had by all.

Thanks especially to the Jackie and John Monte for sustaining all with afternoon tea, as well as to the members who welcomed the visitors and ran their trains. The visitors kindly made a donation to the club and everyone agreed that "we must do this again".

Public Field Day Saturday 17th May 2014

A moderate crowd on an overcast but warm day. With five 7 1/4 locos and five 5" locos we were able to provide multiple rides to all wanting them. Unfortunately, with only 35 members in attendance station attendants were flat out all day with little break. Members please remember that there are many necessary tasks to stage a run day not just driving and operation. The locos were supported by five boats and 10 O/G gauge locos. Six of these were owned by guests from Penfield who apparently had a good day. Cont'd

The canteen was staffed by Jackie Monte, Sue Leslie, Nicki Mere and Anne Hardy. The gate was staffed by John Beal and Alan Hardy was Safety Officer. Thank you all for your contribution.

We tried a new way of handling parties which shows promise but will need a large public attendance to prove its worth.

Boiler Certificate Expiry 2014

As a gentle reminder to members, our records indicate the following have boilers that will be requiring re-test sometime in 2014. Please check your expiry date, and arrange your re-testing with one of the boiler inspectors. If your test has already been done, then you can ignore this.!!

If the test is done by another club, please show the current certificate to a SASMEE boiler inspector.

If our records are incorrect - please let us know.

SASMEE Boiler inspectors, Bryan Homann . John Monteodorisio.

L. Redway. – Jinty.

B. Francis. - Harry.

G. Driscoll. – German 2-8-2

B. Dunstan. – Springbok.

B. Homann - T214.

M. Tingay. – Heisler.

B. Cottle. – Virginia.

G. Richards. – Blowfly.

K. Martin. – Simplex

T. Hill - QGR A10

A. Wallace. – O gauge.

W. Weste – Marine.

S. Shelton. – Marine.

M. Ambler. – Marine.

R. Byles. – Allchin traction engine.

THE ALLCHIN BUILDERS' GROUP

Article submitted by Ralph Byles.

The Allchin Builders Group is made up of 5 members of SASMEE who are working together to each make a 3" [or quarter scale] model of the "Royal Chester" Allchin traction engine.

The group comprises of Simon Huntington, Dean Manderson, Trevor Morcom, Ross Stephenson and Ralph Byles. Individually we had planned, and in some cases started our projects, but it was both the support of our then boiler inspector, John Levers and the recognition of the value of cooperation that brought us together in 2003.

The plans for the 1 1/2" model had been prepared by the late W.J.Hughes. We decided to work in metric units wherever possible so a spread sheet was written to double the Hughes dimensions expressed as fractions of an inch and convert to millimetres. Part way into the project we also started using a 3D CAD program to make a working drawing of each component and assemblies of multiple components to check that pieces would fit together.

We were fortunate to stumble upon the patterns for the model that had been made by Paul Gristi which were found under a house by Len Redway, and passed on to Trevor Morcom. The first task was to clean up these patterns and arrange for castings to be made by Callington Cast Iron. From the outset we recognised that other modellers might be interested in obtaining castings and so decided to have some spares available, to date we have provided components to 21 other model engineers, mostly around Australia but also including the UK and a full set to New Zealand. Cont'd

Currently we have 80 components listed for sale. As our models have progressed and we have sourced hard –to- find items, we have bought in extra and made these available as well.

Although each of us have our own workshop, the bulk of the machining work has been done at Simon`s Mt Compass business. We meet there each Monday and, once a month have a more formal meeting to discuss plans and progress. Dean acts as treasurer and does the purchasing. Ralph looks after sales, the inventory and the website. Simon, Ross and Trevor have the technical background to make it all happen. Simon also obtained a pressure vessel welding accreditation and so was able to weld steel boilers.

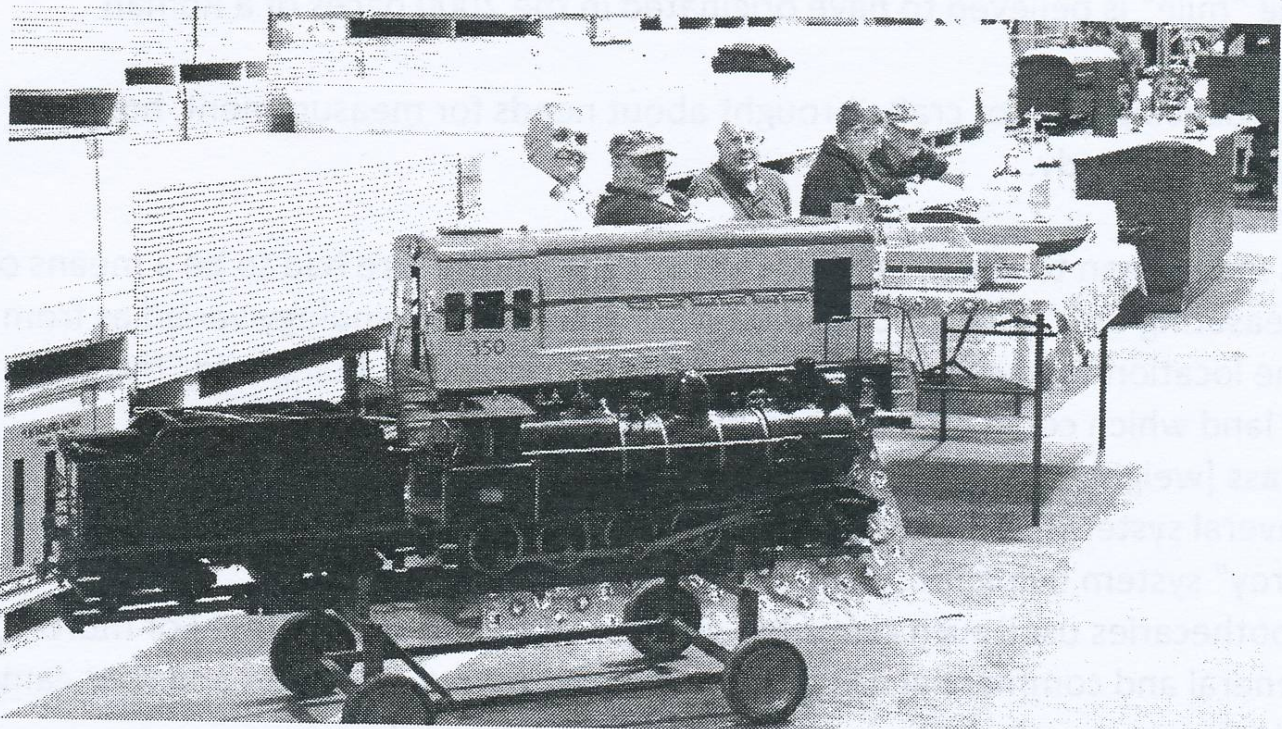
The group originally consisted of 6 members and so we decided to make 7 units, the spare being sold when completed to offset our own costs. One person withdrew, so we had 2 units to sell. One partially completed unit has already gone. With this number it made sense to manufacture jigs to aid machining of the components. Some of these are quite simple but will ensure that holes get drilled in the right place on every piece. Others are quite complicated, like the one for making and assembling the rear wheels that are 450mm in diameter, having 16 spoke each bent differently, attached to one of two tee rings and an irregularly shaped hub, using 4 rivets in a specified pattern of holes!!! We also made aluminium moulds to allow a shaped urethane tyre to be added to the machined rims. For all the tender plates we have made dies that allow the 2.5mm brass plates to be pressed to shape in a matter of minutes. The same applies to wheel spokes.

Cont`d

The group bought a secondhand gear shaper to supplement the machines available in Simon's workshop. Each engine has 8 gears ranging up to 100 teeth, so the investment was very worthwhile.

The undoubted success of the group has been the blending of the various contributions of each of the members whether it be skills, experience, time or finance. The camaraderie between members has also been a big factor. We have enjoyed working together and encouraging each other. While it is true that not every member will have made every piece of his engine, each has played a part and will have the satisfaction of knowing that their model has not only been completed but built in a way that exceeds what they could have done as an individual.

Post script - Ralph was able to complete his engine for the National Rally last October. We expect the others to be running for this year's October rally in Clare.



The above SASMEE members, with models, supported the Woodville Bunnings' Easter Family night on the 10th of May 2014. The public were suitably impressed. Photo by Brian Homann

Metrication. An end result? By the Editor.

Time.

Man's earliest measurements must surely have related to "time". There was "night" and there was "day". Some nights were lighter than others so he could "see" at night. These moon periods followed a regular pattern, and he could hunt at night, if there was need. Other patterns followed in a rhythmic pattern, summer, autumn, winter and spring.

It was not until much later that man began to record time more accurately and divide the day into smaller segments of hours, minutes and seconds.

Distance.

When early man went on a journey he measured the distance by the number of days it took to get there. Longer journeys could be measured by the moon periods or even the seasons. Short distances he began to measure by paces, or by using the length of his limbs or parts of his body. Examples being,

Egyptian "Cubit" – Forearm from elbow to finger tip. - 6 palm widths equalled 1 cubit. - 4 digits equalled 1 palm.

The "foot" was the length of the human foot. - The "inch" was the distance across the knuckle of the thumb. - 12 of these equalled a foot.

The yard was said to have originated as the distance between the tip of King Edgar's nose and the tip of his middle finger of his out stretched arm.

The "fathom" was said to be the length of a Viking's embrace.

The "mile" is believed to have originated in the 2000 paces of a Roman Legionary.

The development of crafts brought about needs for measurement, however rough and ready.

Area.

As man began to divide up the land for cultivation there had to be a means of measuring the "area" of particular plots of land. Terminology varied as from one location to another but the term "acre" remained, being said "the area of land which could be ploughed in a day by a team of oxen."

Mass [weight]

Several systems of measuring weight have developed over the centuries. The "troy" system being for precious metals.

Apothecaries used such terms as "grains, scruples and drachms" For more general and commercial use the terms 'once, pound, hundred and tons came into being.

Volume.

We have grown accustomed to two main measures of volume: Liquid measures and cubic capacity.

There are other examples, but with the development of technology there was a need for a whole new range of measurements.

Technology.

The development of technology gave rise for the need for a whole new range of measurements. Consider the whole new language brought about by the discovery of electricity and the need to quantify its various elements such as volts, amperes, watts, frequency etc. The steam engine brought the need for new terms of measurement and the application of power, measure of performance or describe transfer of power.

Although this proliferation of terms of measurement proceeded at a relatively slow pace over many centuries, geographic, language and national barriers often lead to unco-ordinated development. Some legacies are, The imperial ton is 2240 pounds and the U.S. [short] ton is 2000 pounds. The Imperial gallon is 20% larger than the U.S. gallon whose derivation is the Queen wine gallon of the early eighth century.

The development of trade between countries has given added impetus to the need for a common system of measurement.

The International System of Units {SI} The Metric system was first introduced at the time of the French Revolution. The metre was the basis of the system and was defined as a small fraction of the earth's circumference.. The metric system attracted other European countries and by 1875 seventeen nations signed the "Treaty of the Metre" and an International Bureau of Weights and Measures was established to set standards. Early metric systems were known as the "C.G.S." {Centimetre, Gramme and Second} and the "M.K.S.A." {Metre, Kilogramme, Second and Ampere} systems.

The metric system now internationally adopted is the "Système International d'Unités" abbreviated to SI.

The International System of Units has seven Base Units, two Supplementary Units and many Derived Units. They are, Length, Mass, Time, Thermodynamic temperature, Luminous intensity and amount of Substance.

Article with acknowledgements to the ASA Aust. Std. 1000-1970 .

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